



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

42-045-00070

MEMO

To: Heather Henry
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Southeast Regional Office

From: William Schneider *RPS for WMS*
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Through: Charles J. Zadakis *CJ*
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Date: July 21, 2015

Re: Source Test Review
Monroe Energy, LLC (formerly ConocoPhillips Co.)
Boiler No. 8 (Source ID 033)
Trainer Borough, Delaware County
TitleV Operating Permit No. 23-00003
eFACTS: 2186496 PFID: 293037
Initial eFACTS Inspection Result: NOVIO

Monroe Energy operated the 335 MMBTU/hr No. 8 Boiler at its facility in Trainer Borough. Since the testing of this boiler in May, 2013, the boiler has been inactivated. This boiler's typical fuel at the time of the May, 2013 testing was Refinery Fuel Gas (RFG).

Per TVOP-23-00003, Weston Solutions, Inc. conducted source testing for filterable (front-half) particulate matter (FPM; EPA Method 5) and condensable (back-half) particulate matter (CPM; EPA Method 202) at the outlet of Boiler 8 on May 22, 2013. During testing, the boiler was fired with RFG from the facility's Northside Fuel System.

To determine the lb/MMBTU values, an EPA Method 19 equation on an Oxygen (O₂) and dry basis was utilized, using the facility's generated F-factors.

All tests were conducted in accordance with the pre-approved protocol and are acceptable to the Department for use as compliance purposes, with the results considered representative of operating conditions at the time of testing with the following comment:

BUREAU OF AIR QUALITY

Boiler No. 8 Outlet Emissions (May 22, 2013)

Parameter	Test Run Nos. and Times			Average	Allowable
	1 0921-1107	2 1152-1338	3 1432-1617		
O ₂ (%)	8.0	8.0	7.9	8.0	
FPM(EPA M5)					
gr/dscf	0.0015	0.0008	0.0012	0.0011	≤0.183 ²
lb/hr	0.892	0.436	0.653	0.660	
lb/MMTU ¹	0.0029	0.0015	0.0023	0.0022	
CPM (EPA M202)					
Inorganic CPM					
gr/dscf	0.0009	0.0007	0.0007	0.0008	≤0.183 ²
lb/hr	0.509	0.419	0.382	0.437	
lb/MMTU ¹	0.0017	0.0014	0.0013	0.0015	
Organic CPM					
gr/dscf	<0.00003	<0.00003	<0.00003	<0.00003	≤0.183 ²
lb/hr	<0.0159	<0.0161	<0.0159	<0.0160	
lb/MMBTU ¹	<0.0001	<0.0001	<0.0001	<0.0001	
Total PM (EPA M5+M202)					
gr/dscf	0.0023	0.0015	0.0019	0.0019	≤0.183 ²
lb/hr	1.401	0.855	1.035	1.097	
lb/MMBTU ¹	0.0046	0.0029	0.0036	0.0037	

¹ The lb/MMBTU results were calculated utilizing an EPA Method 19 equation on an O₂ and dry basis, utilizing the facility's generated F-factor (from the Northside Fuel Gas System). These are the recalculated results as discussed in comment no. 1 on p. 2 of this memo.

² The particulate allowable as listed in the permit is determined based on a PA Code Chapter 123.11 equation, $3.6E(-0.56)$, where E represents the heat input with the test report utilizing 204.6 MMBTU/hr, based on the process/operating data during testing.

The permit is not specific as to whether compliance with the permit allowable is to be determined based on the FPM alone or is to be determined based on the sum of the FPM and the CPM.